Dell EMC PowerSwitch N2200-ON Series Warnings and Specifications

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1

N2200-ON Series Warnings and Specifications

This document lists Warnings, Regulatory information, and Specifications for the Dell EMC PowerSwitch N2200-ON Series switch.

Table 1. Document revision history

Revision	Date	Description
A00	2019-12	Initial release.
A01	2020-03	Added Chinese DC input warning.
A02	2021-02	Added Ukrainian language to output. Minor edits.

Support and documentation

- For installation instructions, see the *Dell EMC PowerSwitch N2200-ON Series Installation Guide* at www.dell.com/support/.
- To access the support site, go to www.dell.com/support/. To display information in your language, at the bottom of the page, select your country or region from the drop-down menu.

Information icon definitions:

WARNING: The Warning icon signals information about hardware handling that could result in injury.

CAUTION: The Caution icon signals information about situations that could result in equipment damage or loss of data.

NOTE: The Note icon signals important operational information.

Warnings

WARNING: To avoid electrostatic discharge (ESD) damage, wear grounding wrist straps when handling this equipment.

WARNING: Only trained and qualified personnel can install this equipment. Read the safety instructions in your *Safety, Environmental, and Regulatory*.

WARNING: This switch has multiple power cables. Disconnect all power cables before servicing.

WARNING: This switch has optical transceivers, which comply with the limits of Class 1 laser radiation. When working with optical fibers, follow all warning labels and always wear eye protection.

WARNING: When no cable is connected, visible and invisible laser radiation may be emitted from the aperture of the optical transceiver ports. Avoid exposure to laser radiation and do not stare into open apertures.

WARNING: Never power up the switch if no fan module is installed (does not apply to fanless or fixed-fan switches).

WARNING: Prevent exposure and contact with hazardous voltages. Do not attempt to operate this switch with the safety cover removed. To comply with *GR-1089 Lightning Criteria for Equipment Interfacing with AC or DC Power Ports*, use an external surge protection device (SPD) at the AC or DC input of the router.

WARNING: Equipment that provides DC input to the DC port must be certified for CCC and meet the relevant standards.

WARNING: This equipment must be grounded. Connect the power plug to a properly wired earth-ground socket outlet.

Cautions

CAUTION: Operate the equipment at an ambient temperature not higher than 45°C (113°F).

CAUTION: Stationary pluggable equipment Type-A used in a location with equipotential bonding, such as a telecommunication center, a dedicated computer room, or a restricted access area, must have installation instructions that require protective earth-ground connection verification by a skilled electrician.

Stationäres steckbares Gerät Typ A, das an einem Ort mit Potenzialausgleich (z. B. in einem Telekommunikationszentrum, einem speziellen Computerraum oder einem Bereich mit beschränktem Zugang) verwendet werden soll und über Installationsanweisungen verfügt, die eine Überprüfung der Schutzerdung der Steckdose erfordern von einem Fachmann.

CAUTION: Illustration of the earth-ground verification Caution in German. Illustration of the power cord Caution with translations.



Notes

NOTE: If necessary, to upgrade your software or firmware images, go to the *Drivers and Downloads* page for your switch at www.dell.com/support.

NOTE: For proper ventilation, position the switch with a minimum of 12.7 cm (5 in) of clearance around the exhaust vents.

NOTE: Install the switch into a rack or cabinet before installing any additional components such as cables or optics.

NOTE: Dell Technologies recommends you ground your switch. Use the switch in a common bond network (CBN). Grounding conductors must be made of copper. Copper conductors offer better conductivity and durability. Do not use aluminum conductors. Coat the one-hole lug with an anti-oxidant compound before crimping. Bring any unplated mating surfaces to a clean finish and coat with an anti-oxidant before mating.

NOTE: For RoHS information, see Restricted Material Compliance.

NOTE: This device is not intended for use in the direct field of view at visual display workplaces. To avoid incommoding reflections at visual display workplaces, this device must not be placed in the direct field of view.

Bemerkung: Dieses Gerät ist nicht für den Einsatz im direkten Sichtfeld am Bildschirmarbeitsplatz vorgesehen. Um störende Reflexionen am Bildschirmarbeitsplatz zu vermeiden, darf dieses Gerät nicht im direkten Sichtfeld platziert werden.

Table 2. N2200-ON Series

Marketing model name	N2224X-ON	N2224PX-ON	N2248X-ON	N2248PX-ON
Regulatory model # (RMN)	E41W	E41W	E41W	E41W
Regulatory type # (RTN)	E41W001	E41W003	E41W002	E41W004
2.5G Base-T RJ45	x 24	x 12 802.3at (30 W) PoE x12 802.3bt Type-3 (60 W) PoE	x 48	x 24 802.3at (30 W) PoE x 24 802.3bt Type-3 (60 W) PoE
25G SFP28	x 4	x 4	x 4	x 4
Stacking	2 x QSFP+ (40G per port)	2 x QSFP+ (40G per port)	2 x QSFP+ (40G per port)	2 x QSFP+ (40G per port)
AC or DC PSUs[1]	x 2	x 2	x 2	x 2
(Optional) External power supply (EPS)	—	x 1	—	x 1
Fans	x 2	x 2	x 3	x 3
Size in (H x W x D) mm (H x W x D)	1.71 x 17 x 15.75 43.5 x 434 x 400	1.71 x 17 x 15.75 43.5 x 434 x 400	1.71 x 17 x 15.75 43.5 x 434 x 400	1.71 x 17 x 15.75 43.5 x 434 x 400
Weight[2]	lbs: 14.30 kg: 6.485 PSU is 1.75 lbs (0.79 kg (550W)	lbs: 14.70 kg: 6.67 PSU is 1.95 lbs (0.88 kg (1050W)	lbs: 15.09 kg: 6.845 PSU is 1.75 lbs (0.79 kg (550W)	lbs: 15.77 kg: 7.155 PSU is 2.0 lbs (0.9 kg (1600W)

[1]Maximum number of PSUs available for the switch.

[2]Chassis weight with one PSU.

Mexico-only NOM information

The following information is in compliance with the requirements of the official Mexican standards (NOM):

Table 3. NOM

Description	Details
Exporter	Dell Inc. One Dell Way, Round Rock, TX 78682
Importer	Dell México, S.A. de C.V. Av. Javier Barros Sierra, no 540, Piso 10, Col. Lomas de Santa Fe Delegación Álvaro Obregón, Ciudad de México. C.P. 01219

Table 3. NOM (continued)

Description	Details
	R.F.C: DME9204099R6
Ship to	Dell México, S.A. de C.V. Av. Javier Barros Sierra, no 540, Piso 10, Col. Lomas de Santa Fe Delegación Álvaro Obregón, Ciudad de México. C.P. 01219 R.F.C: DME9204099R6
Supply voltage	100V–240 VAC
Frequency	50–60 Hz
Maximum steady state current consumption	See the *Power consumption parameters* table listed below.

N2200-ON Series Specifications

Table 4. Environmental parameters

Parameter	Specifications
Operating temperature	-0° to 45°C (32°F to 113°F) continuously **NOTE:** Reduce maximum temperature by 1°C/125 meters (1°F/228 feet) above 950 meters (3,117 ft).
Operating humidity	5% to 95% (RH), noncondensing
Storage temperature	–40° to 70°C (–40° to 158°F)
Storage humidity	5% to 95%, noncondensing
Maximum thermal output without PoE	• N2224X-ON: 105 W = 358 BTU/Hr • N2224PX-ON: 115 W = 392 BTU/Hr • N2248X-ON: 160 W = 546 BTU/Hr • N2248PX-ON: 170 W = 580 BTU/Hr
Maximum operational altitude	10,000 feet (3,048 meters)
Maximum non-operational altitude	39,370 ft (12,000 meters)
Shock	Dell EMC Spec SV0115

Table 5. Power consumption parameters

Parameter	Specifications
Input voltage	AC: 100–240 VAC 50/60 Hz DC: –40 VDC to –60 VDC
Input current without PoE	• N2224X-ON: 2.46 Amps @ 110 VAC and 1.23 Amps @ 220 VAC • N2224PX-ON: 2.4 Amps @ 110 VAC and 1.2 Amps @ 220 VAC • N2248X-ON: 3.37 Amps @ 110 VAC and 1.69 Amps @ 220 VAC • N2248PX-ON: 3.3 Amps @ 110 VAC and 1.65 Amps @ 220 VAC
Maximum current draw per system	7A@110VAC 3.5A@220VAC

Table 5. Power consumption parameters (continued)

Parameter	Specifications
Maximum power consumption without PoE	• N2224X-ON & N2224PX-ON: 238 W @ 54 VDC • N2248X-ON & N2248PX-ON: 326 W @ 54 VDC
Total PoE budget **NOTE:** To support a full-load PoE power budget, you must have external PSUs for the N224PX-ON switch. For the N2248PX-ON switch, use the EPS for full-load PoE redundancy.	• N2224PX-ON: 1080 W • N2248PX-ON: 2160 W
PoE output per port	• N2224PX-ON: 24x2.5GBase-T Ports with 12 ports of 802.3at Type-2 (30 W) PoE and 12 ports of 802.3bt Type-3 (60 W) PoE • N2248PX-ON: 48x2.5GBase-T Ports with 24 ports of 802.3at Type-2 (30 W) PoE and 24 ports of 802.3bt Type-3 (60 W) PoE